WHAT IS CLAIMED IS:

1. A method of converting a fatty acid to its corresponding dicarboxylic acid which comprises:

(a) isolating a yeast *POX4* gene promoter;

(b) isolating a target gene involved in dicarboxylic acid production;

(c) operably linking the yeast *POX4* gene promoter to the open reading frame (ORF) of the target gene involved in dicarboxylic acid production to create a fusion gene;

(d) inserting the fusion gene into an expression vector;

(e) transforming a yeast host cell with the expression vector; and

(f) culturing the transformed yeast host cell in a media containing an organic substrate that is biooxidizable to a mono- or polycarboxylic acid.

2. A method for transforming a yeast host cell, said method comprising:

(a) isolating a *POX4* promoter;

(b) isolating a target gene;

(c) operably linking a *POX4* promoter to the open reading frame of the target gene to create a fusion gene;

(d) inserting the fusion gene into an expression vector; and

(e) transforming the host cell with the expression vector.

3. The method of claim 2 wherein the native *POX4* gene of the host cell is disrupted or deleted.

4. The method of claim 1 wherein the target gene codes for a member of an ω-hydroxylase complex.

5. The method of claim 4 wherein the target gene encoding a member of an ω-hydroxylase complex is a *CYP, NCP,* or *CYTb5* gene.

6. The method of claim 5 wherein the CYP, NCP, or CYTb5 gene is selected from the group consisting of *CYP52A2A, CYP52A5A, NCP1B,* or *CYTb5* genes.

7. The method of claim 2 wherein the target gene encodes a member of an ω-hydroxylase complex.

8. The method of claim 7 wherein the target gene coding for a member of an ω-hydroxylase complex is a *CYP, NCP,* or *CYTb5* gene.

9. The method of claim 8 wherein the CYP, NCP, or CYTb5 genes are selected from the group consisting of *CYP52A2A, CYP52A5A, NCP1B,* or *CYTb5* genes.

10. A host cell comprising a nucleic acid molecule for a *POX4* gene promoter operably linked to the open reading frame of a gene encoding a heterologous protein.

11. The host cell of claim 10 wherein the gene encoding a heterologous protein encodes a member of an ω-hydroxylase complex such as any of the *CYP, NCP,* or *CYTb5* genes.

12. The host cell of claim 11 wherein the CYP, NCP, or CYTb5 genes are selected from the group consisting of *CYP52A2A, CYP52A5A, NCP1B,* or *CYTb5* genes.

13. The host cell of claim 10 selected from the group consisting of *Yarrowia, Candida, Bebaromyces, Saccharomyces, Schizosaccharomyces,* and *Pichia.*

14. The *Candida* host cell of claim 13 selected from the group consisting of *C. tropicalis, C. maltosa, C. apicola, C. paratropicalis, C. albicans, C. cloacae, C. guillermondii, C. intermedia, C. lipolytica, C. parapsilosis,* and *C. zeylenoides.*

15. The *Candida* host cell of claim 14 wherein the host cell is *C. tropicalis.*

16. The host cell of claim 15 wherein the host cell is from a β-oxidation blocked strain of *C. tropicalis.*

17. A method of converting a fatty acid to its corresponding dicarboxylic acid, said method comprising:

(a) isolating a promoter from a yeast gene which is induced when the yeast is grown on fatty acids or alkanes;

(b) isolating a target gene involved in dicarboxylic acid production;

(c) operably linking the inducible gene promoter to the open reading frame (ORF) of the target gene involved in dicarboxylic acid production to create a fusion gene;

(d) inserting the fusion gene into an expression vector;

(e) transforming a yeast host cell with the expression vector; and

(f) culturing the transformed yeast host cell in a media containing an organic substrate that is biooxidizable to a mono- or polycarboxylic acid.

18. The method of claim 17 wherein the promoter is the POX4 promoter.

19. The method of claim 17 wherein the promoter is isolated from a *C. tropicalis* gene which is induced when the yeast is grown on fatty acids or alkanes.

20. The method of claim 17 wherein the isolated promoter is from a *C. tropicalis* catalase, citrate synthase, 3-ketoacyl-CoA thiolase A, citrate synthase, O-acetylhomoserine sulphydrylase, protease, carnitine O-acetyltransferase, hydratase-dehydrogenase, or epimerase gene.

21. The method of claim 17 wherein the target gene encodes a member of an ω-hydroxylase complex such as any of the *CYP, NCP,* or *CYTb5* genes.

22. The method of claim 21 wherein the CYP, NCP, or CYTb5 genes are selected from the group consisting of *CYP52A2A, CYP52A5A, NCP1B,* or *CYTb5* genes.

23. A method for increasing conversion of a fatty acid to its corresponding dicarboxylic acid, said method comprising:

(a) isolating a promoter from a yeast gene which is induced when the yeast is grown on a fatty acid or alkane substrate;

(b) isolating at least one of a *CYP*, a *CYTb5* gene, or a *NCP* gene;

(c) operably linking the inducible gene promoter to the open reading frame (ORF) of at least one of a *CYP* gene, a *CYTb5* gene, or an *NCP* gene to create a fusion gene;

(d) inserting the fusion gene into an expression vector;

(e) transforming a yeast host cell with the expression vector; and

(f) culturing the transformed host cell in a media containing an organic substrate that is biooxidizable to a mono- or polycarboxylic acid.

24. The method of claim 23 wherein the promoter is the POX4 promoter.

25. The method of claim 23 wherein the promoter is isolated from a *C. tropicalis* gene which is induced when the yeast is grown on fatty acids or alkanes.

26. The method of claim 23 wherein the promoter is from a gene selected from the group consisting of catalase, citrate synthase, 3-ketoacyl-CoA thiolase A, citrate synthase, O-acetylhomoserine sulphydrylase, protease, carnitine O-acetyltransferase, hydratase-dehydrogenase, or epimerase genes.

27. The method of claim 23 wherein the organic substrate is a saturated fatty acid, an unsaturated fatty acid, an alkane, an alkene, an alkyne, or a combination thereof.